

**REMARKS**

Claims 1 - 8 remain pending in the application, with claims 1, 3 and 6 being independent. Claims 1-8 have been amended. Support for the present amendments may be found in the application at, for example, page 4, line 11 to page 10, line 22. No new matter has been introduced.

For the reasons set forth below, Applicants respectfully submit that all pending claims as currently amended are patentable over the cited prior art.

**Claim Rejections - 35 U.S.C. §§ 102, 103**

Claims 1, 3, and 6 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent Number 6,229,582 ("Van Slooten"). Claims 2, 4, 5, 7, and 8 were rejected as being unpatentable over Van Slooten. Applicants respectfully traverse these rejections for at least the following reasons.

As amended, claim 1 recites a plasma display panel (PDP) adopting an AC surface discharge method including a scan electrode and a sustain electrode both formed on a plate and to which a voltage is applied in order to generate discharge. The PDP also includes a dielectric layer covering the scan electrode and the sustain electrode and a protective layer formed on the dielectric layer. The protective layer is made of magnesium oxide (MgO) including silicon (Si) and nitrogen (N).

To provide context, Applicants note that a conventional PDP adopting an AC surface discharge method has a protective layer made of MgO or MgO to which Si is added. The problem associated with this structure is that the ambient temperature of the PDP greatly changes the discharge-delay time, which results in changing the display quality. The objective of the present invention, in one aspect, is to solve the above stated problems. To this end, the present

invention provides a PDP adopting an AC surface discharge method with a protective layer made of MgO including Si and N, which can shorten a discharge-delay time, achieve a quick response of discharge to a voltage applied, and suppress changes of the discharge-delay time with respect to the temperature. *See e.g.*, Application at page 10, lines 14-19.

The objective of the cited reference Van Slooten, however, is different from the above-stated objective. The objective of Van Slooten is to provide a direct-current plasma-addressed liquid-crystal display device (dc PALC-display) and a direct-current plasma display panel (dc PDP) with a lower energy consumption than the dc PALC-display and the dc PDP of the prior art. *See e.g.*, Van Slooten at col. 1, line 11 to col. 2, line 14 and Abstract. To achieve this, Van Slooten discloses in FIG. 2 a PALC-display device that includes a compartment (30, 30', 30'') having walls covering a dielectric layer (36) on a front panel (38), and which are made of a secondary electron emitting material including a material of the group formed by magnesium oxide, chromium oxide, silicon nitride, and yttrium oxide. Van Slooten at col. 2, lines 51-68.

The compartments (30, 30', 30'') are filled with ionizable gas (33) and are sealed with dielectric layer (36). Van Slooten at col. 4, lines 50-54. Each of the compartments is provided with first and second elongated electrodes (31, 32) to which dc voltage is applied for ionizing gas (33). As such, it is clear that Van Slooten describes a PDP adopting a DC discharging method and not a PDP adopting an AC surface discharging method, as recited in claim 1 (emphasis added).

Accordingly, Van Slooten cannot describe or suggest a PDP adopting an AC surface discharge method including a scan electrode and a sustain electrode both formed on a plate and to which a voltage is applied in order to generate discharge; a dielectric layer covering the scan

electrode and the sustain electrode; and a protective layer formed on the dielectric layer, wherein the protective layer is made of MgO including Si and N, as recited in claim 1 (emphasis added).

For at least this reason, Applicants respectfully request that the § 102 rejection of claim 1 and its dependent claims be withdrawn.

To further distinguish Van Slooten, Applicants respectfully submit that the alleged column electrode (29) of Van Slooten does not correspond to “the scan electrode and the sustain electrode” recited in claim 1, as suggested by the Office Action. *See, e.g.*, Office Action at page 2, lines 13-14. In claim 1, a voltage is applied to the scan electrode and the sustain electrode in order to generate discharge. On the other hand, in Van Slooten, although a voltage is applied to column electrode (29), this voltage does not generate discharge. As such, column electrode (29) cannot correspond to the scan electrode and the sustain electrode recited in claim 1.

For the foregoing reasons, Applicants respectfully request that the § 102 rejection of claim 1 and its dependent claims be withdrawn.

Claims 3 and 6 have been amended to include features similar to the above-recited features of claim 1. Therefore, for at least the reasons presented above with respect to claim 1, Applicants respectfully request that the § 102 rejection of claims 3 and 6, along with their dependent claims be withdrawn.

### **Dependent Claims**

Under Federal Circuit guidelines, a dependent claim is nonobvious if the independent claim upon which it depends is allowable because all the limitations of the independent claim are contained in the dependent claims, *Hartness International Inc. v. Simplimatic Engineering Co.*, 819 F.2d at 1100, 1108 (Fed. Cir. 1987). Accordingly, as claims 1, 3, and 6 are patentable for

**Application No.: 10/520,905**

the reasons set forth above, it is respectfully submitted that all claims dependent thereon are also patentable. In addition, it is respectfully submitted that the dependent claims are patentable based on their own merits by adding novel and non-obvious features to the combination.

Based on the foregoing, it is respectfully submitted that all pending claims are patentable over the cited prior art. Accordingly, it is respectfully requested that the rejection under 35 U.S.C. § 102 be withdrawn.

**Conclusion**

Having fully responded to all matters raised in the Office Action, Applicants submit that all claims are in condition for allowance, an indication for which is respectfully solicited. If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicants' attorney at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,  
McDERMOTT WILL & EMERY LLP

  
Michael E. Fogarty  
Registration No. 36,139

600 13<sup>th</sup> Street, N.W.  
Washington, DC 20005-3096  
Phone: 202.756.8000 MEF:MaM  
Facsimile: 202.756.8087  
**Date: January 4, 2007**

**Please recognize our Customer No. 53080  
as our correspondence address.**